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| 10/591,243 | 08/31/2006 | Maria Teresa Fernandez de Castro | 15517NP | 9295 |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|------------------------|----------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/591,243 | FERNANDEZ DE CASTRO ET AL. |
| | Examiner | Art Unit |
| | MEI-PING CHUI | 1616 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 09 October 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-98 is/are pending in the application.

4a) Of the above claim(s) 3,7,9,19,21-26,37-39,54-56,58,60 and 69-71 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,2,4-6,8,10-18,20,27-36,40-53,57,59,61-68 and 72-98 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>see continuation below</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

08/31/2006; 10/13/2006; 11/21/2006; 12/08/2006; 01/09/2007; 06/20/2007; 04/22/2008; 05/08/2008; 06/24/2008; 09/26/2008; 10/16/2009; 11/19/2009; 11/19/2009; 12/17/2009; 01/12/2010; 09/17/2010; 11/03/2010; 02/02/2011.

DETAILED ACTION

Status of Action

Receipt of Application 10/591,243 filed on 08/31/2006 is acknowledged.

Claims 1-98 are pending in the application.

Election of Species

This application contains claims directed to the following patentably distinct species:

- Group A: a silicone-based surface active agent;
- Group B: an additional surfactant;
- Group C: a foam stabilizing agent;
- Group D: an anti-microbial agent.

The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species, and these species are not obvious variants of each other based on the current record. In addition, the disclosed species in each group are patentably distinct, each from the other, because they posses different chemical structures, as well as different physical properties.

Applicants are required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph. Therefore, election of species requirement is proper even though this requirement is traversed.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a single disclosed species from Group A, Group B, Group C and Group D, that is to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must explicitly indicate which claims are readable upon the elected species. See MPEP § 809.02(a). Amendments submitted after final rejection are governed by 37 CFR 1.116, whereas amendments submitted after allowance are governed by 37 CFR 1.312.

Joint Inventorship

Applicant is reminded that upon the cancellation of claims to a non-elected species, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

A telephone call was made to Alyssa Finamore to request an oral election to the above election of species.

Status of Action

Applicants' election of species, without traverse, is acknowledged. In response to the election of species, Applicants elected: Bis-PEG-12 dimethicone as the silicone-based surfactant (Group A); cocoglucoside (from claim 20) as the additional surfactant (Group B), behentrimonium chloride (from claim 29) as the foam stabilizing agent (Group C) and chlorhexidine gluconate (from claim 36) as the anti-microbial agent (Group D).

Status of Claims

Accordingly, claims 1-2, 4-6, 8,10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 are presented for examination on the merits for patentability as they read upon the elected subject matter and claims 3, 7, 9, 19, 21-26, 37-39, 54-56, 58, 60 and 69-71 directed to non-elected inventions are withdrawn.

DOUBLE PATENTING

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper time wise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the

reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

(1) Claims 1-2, 4-6, 8, 10-18, 27, 29-34, 40-53, 57, 59, 61, 63-66, 72-81, 87-90, 92 and 94-98 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11, 19, 21-26, 32-36, 43-50, 52-57 and 59-63 of co-pending U.S. Patent Application No. 11/520,819.

Although the conflicting claims are not identical, they are not patentably distinct from each other. The instant claims 1-2, 4-6, 8, 10-18, 27, 29-34, 40-53,

57, 59, 61, 63-66, 72-81, 87-90, 92 and 94-98 are drawn a foamable alcohol composition, wherein the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant and water, and further comprises additional surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, a corrosive inhibitor; wherein the foam is dispensed from a container having a dispenser pump configured to mix air or a propellant with the foamable alcohol composition and the dispenser can be an unpressurized dispenser or a pressurized dispenser. The instant claims 87-89 are drawn to a method of forming a foam from the foamable alcohol composition set forth above.

The conflicting claims of co-pending U.S. Patent Application No. 11/520,819 are drawn to a foamable alcohol disinfecting composition and a method of forming a foam from said composition, which the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant, water; wherein the composition further comprises additional surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an corrosive inhibitor; wherein the foam is dispensed from a container having a dispenser pump configured to mix air or a propellant with the foamable alcohol composition and the dispenser can be an unpressurized dispenser or a pressurized dispenser. The conflicting claims 49 and 52-56 are drawn to a method of forming a foam from the foamable alcohol composition set forth above.

The instant and conflicting claims differ in that the instant claims do not recite a method of applying the skin disinfecting alcohol foam to a person's skin,

where the conflicting claims include a method of applying a skin disinfecting alcohol foam set forth above to a person's skin. However, the instant claims recite that the claimed foamable alcohol composition is intended for disinfection purpose.

Therefore, one of ordinary skill in the art would have been motivated to apply the foamable alcohol composition to a user's skin when the composition is intended for use for skin disinfection purpose.

Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 1-11, 19, 21-26, 32-36, 43-50, 52-57 and 59-63 of co-pending U.S. Patent Application No. 11/520,819 and claims 1-2, 4-6, 8, 10-18, 27, 29-34, 40-53, 57, 59, 61, 63-66, 72-81, 87-90, 92 and 94-98 in the instant application are obvious variants and are not patentably distinct.

(2) Claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-10, 12, 15-25, 29, 31, 33-37, 39-50 of co-pending U.S. Patent Application No. 11/806,767.

Although the conflicting claims are not identical, they are not patentably distinct from each other. The instant claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 drawn to a foamable alcohol composition, wherein the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant, water, wherein the composition further comprises additional

surfactant, a fluoro-surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an antimicrobial agent, an corrosive inhibitor; wherein the foam is dispensed from a container having a dispenser pump configured to mix air or a propellant with the foamable alcohol composition and the dispenser can be an unpressurized dispenser or a pressurized dispenser. The instant claims 87-89 are drawn to a method of forming a foam from the foamable alcohol disinfecting composition set forth above.

The conflicting claims of co-pending U.S. Patent Application No. 11/806,767 are drawn to a foamable alcohol disinfecting composition and a method of forming a foam from said composition, which the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant, water; wherein the composition further comprises additional surfactant, a fluoro-surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an antimicrobial agent, an corrosive inhibitor; wherein the foam is dispensed from a container having a dispenser pump configured to mix air with the foamable alcohol composition and the dispenser can be an unpressurized dispenser or a pressurized dispenser.

The instant and conflicting claims differ in that the instant claims do not recite a method of applying the skin disinfecting alcohol foam to a person's skin, where the conflicting claims include a method of applying a skin disinfecting alcohol foam set forth above to a person's skin.

Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 1-2, 4-10, 12, 15-25, 29,

31, 33-37, 39-50 of co-pending U.S. Patent Application No. 11/806,767 and claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 in the instant application are obvious variants and are not patentability distinct.

(3) Claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-107 of U.S. Patent No. 7,683,018 and claims 1-132 of U.S. Patent No. 7,199,090 in view of Hoang et al. (U. S. Patent No. 5,629,006).

Although the conflicting claims are not identical, they are not patentably distinct from each other. The instant claims are drawn to a foamable alcohol composition, wherein the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant, water, wherein the composition further comprises an additional surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an antimicrobial agent; wherein the foam is dispensed from a container having a dispenser pump configured to mix air with the foamable alcohol composition and the dispenser can be an unpressurized dispenser. The instant claims also recite a method for forming a foam from the foamable alcohol composition set forth above.

The conflicting claims of U.S. Patent No. 7,683,018 are drawn to a method of forming a skin disinfecting foam containing alcohol, which the foam comprises an C₁₋₄ alcohol or a mixture thereof, an anionic phosphate fluoro-surfactant, water; wherein the alcohol foam further comprises an additional surfactant, a

foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an antimicrobial agent, a constituent; wherein the foam is dispensed from a container having a dispenser pump configured to mix air under low pressure conditions and the dispenser can be an unpressurized dispenser. The conflicting claims also recite a method for personal disinfection and a method of producing and applying a skin disinfecting alcohol foam composition set forth above to a person's skin.

The conflicting claims of U.S. Patent No. 7,199,090 are drawn to a foamable alcohol disinfecting composition, which comprises an C₁₋₄ alcohol or a mixture thereof, an anionic phosphate fluoro-surfactant and water; wherein the alcohol foam further comprises an additional surfactant, a foam stabilizing agent, a moisturizer or emollient or lipid layer enhancer, a pH adjuster, an antimicrobial agent, a constituent; wherein the foam is dispensed from a container having a dispenser pump configured to mix air under low pressure conditions and the dispenser can be an unpressurized dispenser or a pressurized dispenser. The conflicting claims also recite a method for personal disinfection and a method of producing and applying a skin disinfecting alcohol foam composition set forth above to a person's skin.

The instant and conflicting claims differ in that the instant composition claims a silicone-based surfactant, where the conflicting compositions claim an anionic phosphate fluoro-surfactant. However, this deficiency is cured by Hoang et al.

Hoang et al. teach a skin disinfecting formulation that provides antimicrobial effectiveness and is mild and gentle to human skin, wherein the formulation comprises an alcohol, a block copolymer, a foaming surfactant, an emulsifier, a polyalkylene glycol, a moisturizer and/or emollient, water which is balanced to 100 % by weight of the formulation (column 1, lines 45-53; column 2, line 1; column 8, Table 1). Hoang et al. teach that the skin disinfecting formulations can provide significant foaming properties, good solubility in water, and is suitable for use in the health care profession (column 2, lines 2-42).

Hoang et al. teach that the preferred alcohol for use in the skin disinfecting formulation is isopropyl alcohol and ethanol, or isopropyl alcohol which can be present in an amount from about 50-80 % by weight (column 1, line 57; column 3, lines 1-5). Hoang et al. also teach that the block copolymer is polydimethyl siloxane-polyethylene oxide composed of a siloxane backbone with organic polyalkylene oxide pendants, which the silicone block copolymer can provide desired properties, such as low surface tension, high wetting, good dispersing, emulsifying, lubricity, sheen, gloss enhancing, static suppressing, good thermal stability, compatibility with organic surfactants, and low toxicity profile (column 3, lines 6-27). Hoang et al. also teach that the polydimethyl siloxane-polyethylene oxide is present in an amount from about 0.02 % to about 5 % by weight (column 3, line 66 to column 4, line 2).

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the U. S. Patent No. 7,683,018 or the

U.S. Patent No. 7,199,090 with the teaching of Hoang et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to substitute the fluorosurfactant with another surfactant, i.e. a silicone-based surfactant, because the prior art Hoang et al. teaches that the silicone type of copolymers, i.e. polydimethyl siloxane-polyethylene oxide composed of a siloxane backbone with organic polyalkylene oxide pendants, can provide desired properties, such as low surface tension, high wetting, good dispersing, emulsifying, lubricity, sheen, gloss enhancing, static suppressing, good thermal stability, compatibility with organic surfactants, and low toxicity profile. Therefore, their desirable properties would have motivated one of ordinary skill in the art to try it.

From the teaching of the reference, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 1-107 of U.S. Patent No. 7,683,018 and claims 1-132 of U.S. Patent No. 7,199,090, and claims 1-2, 5-22, 26-29, 31, 33-34, 36-37, 39-40, 42-43 and 45-50 in the instant application are obvious variants and are not patentability distinct.

(4) Claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-98 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 78-119 of U.S. Patent

Application No. 12/659,063 in view of Hoang et al. (U. S. Patent No. 5,629,006).

Although the conflicting claims are not identical, they are not patentably distinct from each other. The instant claims are drawn to a foamable alcohol composition, wherein the composition comprises a C₁₋₄ alcohol or a mixture thereof, a silicone-based surfactant, water, wherein the composition further comprises a physiologically acceptable fluoro-surfactant, an additional surfactant and a foam stabilizing agent; wherein the foam is dispensed from a container having a dispenser pump configured to mix air with the foamable alcohol composition and the dispenser can be an unpressurized dispenser. The instant claims also recite a method for forming a foam from the foamable alcohol composition set forth above.

The conflicting claims of U.S. Patent Application No. 12/659,063 are drawn to a method of forming a skin disinfecting foam containing alcohol, which the foam comprises an C₁₋₄ alcohol or a mixture thereof, an anionic phosphate fluoro-surfactant and water; wherein the alcohol foam further comprises an additional surfactant and a foam stabilizing agent; and wherein the foam is dispensed from a container having a dispenser pump configured to mix air under low pressure conditions and the dispenser can be an unpressurized dispenser. The conflicting claims also recite a method for personal disinfection and a method of producing and applying a skin disinfecting alcohol foam composition set forth above to a person's skin.

The instant and conflicting claims differ in that the instant composition claims a silicone-based surfactant, where the conflicting compositions claim an anionic phosphate fluoro-surfactant. However, this deficiency is cured by Hoang et al.

Hoang et al. teach a skin disinfecting formulation that provides antimicrobial effectiveness and is mild and gentle to human skin, wherein the formulation comprises an alcohol, a block copolymer, a foaming surfactant, an emulsifier, a polyalkylene glycol, a moisturizer and/or emollient, water which is balanced to 100 % by weight of the formulation (column 1, lines 45-53; column 2, line 1; column 8, Table 1). Hoang et al. teach that the skin disinfecting formulations can provide significant foaming properties, good solubility in water, and is suitable for use in the health care profession (column 2, lines 2-42).

Hoang et al. teach that the preferred alcohol for use in the skin disinfecting formulation is isopropyl alcohol and ethanol, or isopropyl alcohol which can be present in an amount from about 50-80 % by weight (column 1, line 57; column 3, lines 1-5). Hoang et al. also teach that the block copolymer is polydimethyl siloxane-polyethylene oxide composed of a siloxane backbone with organic polyalkylene oxide pendants, which the silicone block copolymer can provide desired properties, such as low surface tension, high wetting, good dispersing, emulsifying, lubricity, sheen, gloss enhancing, static suppressing, good thermal stability, compatibility with organic surfactants, and low toxicity profile (column 3, lines 6-27). Hoang et al. also teach that the polydimethyl siloxane-polyethylene

oxide is present in an amount from about 0.02 % to about 5 % by weight (column 3, line 66 to column 4, line 2).

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the U.S. Patent Application No. 12/659,063 with the teaching of Hoang et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to substitute the fluorosurfactant with another surfactant, i.e. a silicone-based surfactant, because the prior art Hoang et al. teaches that the silicone type of copolymers, i.e. polydimethyl siloxane-polyethylene oxide composed of a siloxane backbone with organic polyalkylene oxide pendants, can provide desired properties, such as low surface tension, high wetting, good dispersing, emulsifying, lubricity, sheen, gloss enhancing, static suppressing, good thermal stability, compatibility with organic surfactants, and low toxicity profile. Therefore, their desirable properties would have motivated one of ordinary skill in the art to try it.

From the teaching of the reference, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, one of ordinary skill in the art, at the time the claimed invention was made, would have readily recognized that claims 78-119 of U.S. Patent Application No. 12/659,063 and 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68 and 72-98 in the instant application are obvious variants and are not patentability distinct.

Claim Rejections - 35 USC § 112 second paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-2, 4-6, 8, 10-18, 20, 27-36, 40-53, 57, 59, 61-68, 72-96 are rejected 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. All dependent claims are also included in this rejection.

(1) Claim 1 recites the phrase "greater than about", which is indefinite. Although the use of phrase "greater than" in a claim is permissible; the use of this phrase together with the term "about" is impermissible. Since the term "about" is not defined by the claim, and the specification does not provide a standard for ascertaining the requisite extend of the term "about", one of ordinary skill in the art would not be reasonably apprised what the % volume of the alcohol is covered by this term "about".

(2) Claim 18 recites a term "derivative", which is indefinite because this term "derivative" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite extent of what compound is considered as a "derivative" of the recited constituent, and one of ordinary skill in the art would not be reasonably apprised what the metes and bounds of these "derivatives" are.

(3) Claims 18, 36, 45, 48, 52, 64-65, 68 and 80 recite the amount of the components in "% by weight", which is indefinite because it is unclear whether the recited amount (in % by weight) is based on the total % weight of the composition, or it is based on a portion of the composition.

(4) Claims 27, 30, 33-34, 42, 66, 72 and 79 recite the ingredients: a foam stabilizing (see claim 27), one or more moisturizer, emollients, lipid layer enhancers (see claim 30), a preservative (see claim 33), an antimicrobial agent (see claim 34), a corrosive inhibitor (see claim 42) are included. The recitations of these ingredients lack sufficient antecedent basis because their precedent claims do not recite the presence of these ingredients. If Applicants intend to include the ingredients set forth above in the composition, it is suggested that the phrase "further" be adopted.

(5) Claims 30, 48, 65, 80 and 95 recite the compound "PEG-200 hydrogenated glyceryl palmate", which is indefinite because it is unclear whether Applicants mean "palmitate" which is an ester or salt of palmitic acid; or Applicants mean "palmate" which is defined as a shape similar to that of a hand with the fingers extended. Since the chemical structure of "PEG-200 hydrogenated glyceryl palmate" cannot be deduced by this nomenclature, and thus it renders the claim indefinite.

(7) Claims 48 and 65 recite the limitation "the moisturizers and emollients include cocoglucoside, glyceryl oleate, or PEG-200 hydrogenated glyceryl palmitate, dihydroxypropyl PEG-5 linoleammonium chloride, PEG-7 glyceryl

cocoate, and combination thereof", which is indefinite because it is unclear what Applicants intend to claim with respect to the moisturizers and emollients.

(8) Claims 4, 46 and 61 recite the component "3-(3-hydroxypropyl)-heptamethyltrisiloxane, ethoxylated, acetate", which is indefinite because it is unclear whether Applicants intend to claim three different species: "3-(3-hydroxypropyl)-heptamethyltrisiloxane" or "ethoxylated" or "acetate"; or Applicants means 3-(3-hydroxypropyl)-heptamethyltrisiloxane ethoxylated acetate" as a single constituent.

Claim Rejection - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 11-12, 17-18, 33-36, 40, 42-43, 52, 66-68 and 77-78 are rejected under 35 U.S.C. 102(b) as being anticipated by Scholz et al. (U. S. Patent No. 5,951,993).

The instant claims are drawn to a foamable alcohol composition comprising: (a) a C₁-C₄ alcohol, i.e. methanol, ethanol, n-propanol, isopropanol, butanol or a combination thereof (greater than 40 % v/v of the total composition); (b) a silicone-based surfactant (at least 0.01 % by weight of the total composition); (c) water (balance to 100 % by weight of the total composition);

and the composition further comprises: (d) an additional surfactant, i.e. an alkyl alcohol or an alkyl-glucoside (from about 0.1 % - about 5 % by weight); (e) a foam-stabilizing agent, i.e. glycerine; (f) a preservative (from about 0.01 % - about 5 % by weight) or an antimicrobial agent; and (g) one or more constituents; wherein the composition is stored in a pressurized dispenser having a dispenser pump for mixing the composition with a propellant, i.e. propane, and dispensing the foam therefrom.

The prior art **Scholz et al.** discloses a stable hydro-alcoholic composition useful as products for skin disinfection, i.e. surgical hand preparation or patient skin preparation, and antimicrobial, which comprises a lower chain alcohol, a thickener system and water (column 1, lines 9-13; column 2, lines 19-37; column 4, lines 43-50). Scholz et al. disclose that the hydro-alcoholic composition can be formulated into an aerosol foam by addition of an appropriate propellant and delivered from the container, wherein the preferred propellants, i.e. propane, can be used in an amount from 3-20 % by volume of the composition (column 21, lines 45-67; column 53, claim 57).

Scholz et al. disclose that the alcohol used in the composition is lower chain C₁-C₄ alcohol, i.e. ethanol, 2-propanol or n-propanol, or a mixture thereof, which provides broad spectrum and quick killing of microbes and has an odor acceptable to consumers and can be dispensed as foam (column 4, lines 51-61).

Scholz et al. also disclose that the thickener system imparts the stability and viscosity of the composition, wherein the thickener system comprises, preferably, at least two different classes of emulsifiers. Scholz et al. also disclose

that when the emulsifier is present in an amount at least 0.05 % by weight, it acts as a thickener and is capable of achieving high viscosities at relatively low total emulsifier concentrations. If an emulsifier does not result in increasing the viscosity of the composition, it is considered as an emollient or stabilizer (column 7, lines 6-42).

Scholz et al. further disclose that the suitable emulsifier classes include alkyl polyglucosides, i.e. oleoyl glucoside or cetearyl glucoside; alkyl alcohols, i.e. behenyl alcohol; polyglycerol esters; quaternary amines, i.e. behenyltrimethylammonium chloride; ethoxylated and/or propoxylated alcohols or esters, i.e. polyethoxylated alcohol steareth-2 which sold under the tradename Brij-72, can be used in the composition (column 5, line 44 to column 14, line 56; column 12, Class 8, lines 45-49).

Scholz et al. disclose that other additional constituents can also be included in the composition, such as emollients, e.g. propylene glycol, glycerol or sorbitol, can be employed in the composition to increase the moisture content of the stratum corneum and can be present in an amount of about 5-12 % by weight (column 17, line 35 to column 18, line 38; particular column 18, lines 34-38). Other polysiloxane-type emollients, i.e. a long chain dialkoxy polysiloxane and polyether/polysiloxane copolymer, can be employed and emulsified in the hydroalcoholic solvents to promote the stability of the thickener system (column 18, lines 21-31; column 19, lines 42-60; column 51, claims 10 and 23). Scholz et al. disclose that the dialkoxy polysiloxanes can be dialkoxy dimethicones and the polyether/polysiloxane copolymers (dimethicone copolyols) having the structure

as follows (column 19, line 64 to column 20, line 21): $(CH_3)_3-Si-O-[Si(CH_3)R_{11}-O]_x(Si(CH_3)R_8-O]_y-Si(CH_3)_3$, where $R_8 = R_9 (C_2H_4O)_p(C_3H_6O)_qR_{10}$; $p =$ preferably 8-100.

Scholz et al. disclose a specific formulation, which comprises the constituents as follows: ethanol in an amount of 61.86 % by weight (which corresponds to 78.4 % by volume based on its density = 0.789 g/ml); chlorhexidine gluconate (which is an antimicrobial agent) in an amount of 5 %; glycerol (which is a moisturizer/emollient) in an amount of 0.72 %; dimethicone L45/350 (which is an silicone-based surfactant) in an amount of 0.5 %; behenyl alcohol (which is an alkyl alcohol recited as an additional surfactant) in an amount of 0.67 %; and water in an amount of 25.11 %, by weight based on the total weight of the formulation (see column 49, Example 37).

Furthermore, Scholz et al. disclose that the formulations can include glycerine (which is recited as a foaming stabilizer) in an amount of 2 % or 2.5 % by weight of the formulation, and the results showed that these formulations have good cosmetic properties and overall the skin condition significantly improved (see: column 41, sample No. 7 and lines 58-63; column 41-43, example 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(1) Claims 2, 4, 6, 8, 10, 13-16, 27-31, 41, 45-47, 49-51, 53, 57, 59, 61-64, 72-74, 76, 80-81, 87-93 and 97-98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al. (U. S. Patent No. 5,951,993) in view of Dubois et al. (U. S. Patent No. 5,843,881) and Wivell et al. (U. S. Patent No. 5,439,682) in combination.

Applicants Claim

Applicants claim a foamable alcohol composition comprising: (a) a C₁-C₄ alcohol, i.e. methanol, ethanol, n-propanol, isopropanol, butanol or a combination thereof (greater than 40 % v/v of the total composition); (b) a silicone-based surfactant (at least 0.01 % by weight of the total composition); (c) water (balance to 100 % by weight of the total composition); and the composition further comprises: (d) an additional surfactant, i.e. an alkyl alcohol or an alkyl-glucoside (from about 0.1 % - about 5 % by weight); (e) a foam-stabilizing agent, i.e. behentrimonium chloride; (f) one or more moisturizers/emollients, i.e. glycerol, propylene glycol, sorbitol; (g) a preservative (from about 0.01 % - about 5 % by

weight); (h) an antimicrobial agent, i.e. chlorhexidine gluconate; and (i) one or more constituents; wherein the composition is stored in a unpressurized dispenser having a dispenser pump for mixing the composition with air under low pressure or stored in a pressurized dispenser having a dispenser pump for mixing the composition with a propellant, and dispensing the foam therefrom.

Applicants also claim a method of forming a foam from the above foamable alcohol composition, a method for forming a foam from the foamable composition set forth above.

Determination of the scope and content of the prior art

(MPEP 2141.01)

The teaching of Scholz et al. has been set forth above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Scholz et al. do not teach the foam is dispensed by an unpressurized dispenser, as claimed. However, this deficiency is cured by Dubois et al. and Wivell et al. in combination.

Dubois et al. teach a composition for application to the skin and can be delivered from a wide range of known non-aerosol mechanical pump device or pressurized aerosol canisters using propellant, wherein the composition comprises, preferably, from about 70-85 % by weight of lower alcohols, i.e. ethanol, n-propanol, isopropanol or a mixture thereof (column 2, lines 9-12, 31-36; column 3, lines 30-58).

Wivell et al. teach a personal cleansing and moisturizing composition, which comprises an anionic surfactant in combination with at least one additional surfactant to provide a good cleansing, foaming and moisturizing benefits, and yet are mild to the skin, wherein the additional surfactant can be betaines, i.e. cocamidopropyl betaine (column 3, lines 18-29; column 4, line 17).

Wivell et al. also teach that the composition can be formulated and delivered as a foam by a non-aerosol pump container or by an aerosol container charged with a suitable propellant system (column 7, line 55 to column 8, line 5). Wivell et al. further teach that the non-aerosol containers do not use any propellant, but they can create foam from almost any surfactant composition by placing the composition in the container reservoir with hand forces the composition through a foamer head, or other foam producing means, where the composition is mixed with air and then through a homogenizing means that makes the foam more homogeneous and controls the consistency of the foam. The foam is then discharged as uniform, non-pressurized aerated foam (column 8, lines 1-29).

Wivell et al. also teach that the pressurized aerosol delivery system is well known in the art and when is used, the composition further comprises 25-80 % of suitable propellants, i.e. butane or propane, at a level sufficient to expel the contents of the container (column 8, lines 30-41).

Scholz et al. also do not exemplify the use of a mixture of n-propanol and ethanol in their examples. However, Scholz et al. teach that the alcohol content

of the composition can be a single alcohol, i.e. ethanol, 2-propanol or n-propanol, or can be a blend of two or more C₁-C₄ alcohols (see column 4, lines 51-61).

Finding of prima facie obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teaching of Scholz et al. with Dubois et al. and Wivell et al. to arrive at the instant invention.

One of ordinary skilled in the art would have been motivated to deliver the composition through a non-pressurized aerosol delivery system because the prior art teaches that compositions containing high alcohol content can be delivered from a wide range of well known delivery systems, such as a non-aerosol mechanical pump device or a pressurized aerosol canisters using propellant. One of ordinary skill in the art also would have been motivated to particularly deliver the foam composition using a non-pressurized pump container because the prior art teaches that the non-pressurized delivery container that uses hand force and foamer head allows the composition mixes with air and produces foam which is more homogeneous and is more consistency.

With respect to the recitation which the silicone-based surfactant is bis-PEG-12 dimethicone, one of ordinary skill in the art would have been motivated to substitute the polyether/polysiloxane copolymers (dimethicone copolyols) as taught in Scholz et al. with another dimethicone copolymer, such as bis-PEG-12 dimethicone as claimed, because these silicone-based dimethicone copolymers

are functional equivalent silicone-based copolymers, and thus they can be used interchangeably.

From the teaching of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

(2) Claims 1, 42, 44, 52, 77 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al. (U. S. Patent No. 5,951,993) in view of Tomlinson, R. (WO 85/01876).

Applicants Claim

Applicants claim a foamable alcohol composition comprising: (a) a C₁-C₄ alcohol (greater than 40 % v/v of the total composition); (b) a silicone-based surfactant (at least 0.01 % by weight of the total composition); (c) water (balance to 100 % by weight of the total composition); and the composition further comprises: corrosive inhibitor, i.e. sorbic acid, benzoic acid, potassium sorbate or sodium benzoate, in an amount from about 0.1 % to about 5 % by weight of the composition; wherein the composition is stored in a pressurized dispenser having a dispenser pump for mixing the composition with a propellant and dispensing the foam therefrom.

Determination of the scope and content of the prior art

(MPEP 2141.01)

The teaching of Scholz et al. has been set forth above.

Ascertainment of the difference between the prior art and the claims**(MPEP 2141.02)**

Scholz et al. do not teach the foamable alcoholic composition includes a corrosive inhibitor, as claimed. However, the deficiency is cured by Tomlinson, R.

Tomlinson, R. teaches an improved biocidal composition, which is in the form of an aerosol foam, comprising an alcoholic chlorhexidine which is easy and safe to use (page 2, lines 24-33). Specifically, Tomlinson, R. teaches that the biocidal composition comprises an alcoholic chlorhexidine solution, a quick breaking foaming agent, an aerosol propellant and a corrosive inhibitor; wherein the quick breaking foaming agent comprises: (i) an aliphatic alcohol in an amount from 40-90 % by weight of the composition; (ii) water; (iii) a fatty alcohol and (iv) a surface active agent (page 19-20, claims 1-9).

Tomlinson, R. also teaches that the inclusion of a corrosive inhibitor is necessary when the composition is stored in metal containers to counteract the corrosive nature of chlorhexidine formulation, where the suitable corrosive inhibitor can be organic acid salts, i.e. sorbic acid, benzoic acid, sodium benzoate and potassium sorbate, and it can be present in an amount from 0.1 % to 15 %, preferably 0.1 % to 3 % by weight of the composition (page 3, lines 3-8; page 5, lines 4-13; page 20, claims 10-13).

Finding of prima facie obviousness Rational and Motivation**(MPEP 2142-2143)**

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teaching of Scholz et al. with Tomlinson, R. to arrive at the instant invention.

One of ordinary skilled in the art also would have been motivated to incorporate a corrosive inhibitor into the formulation because the prior art teaches that when the alcoholic composition containing chlorhexidine is stored in metal containers, it is necessary and desirably to include a corrosive inhibitor to counteract the corrosive nature of chlorhexidine formulation.

From the teaching of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

(3) Claims 1, 31-32, 52 and 74-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al. (U. S. Patent No. 5,951,993) in view of Hoang et al. (U. S. Patent No. 5,629,006).

Applicants Claim

Applicants claim a foamable alcohol composition comprising: (a) a C₁-C₄ alcohol (greater than 40 % v/v of the total composition); (b) a silicone-based surfactant (at least 0.01 % by weight of the total composition); (c) water (balance to 100 % by weight of the total composition); and the composition further comprises a pH adjuster.

Determination of the scope and content of the prior art**(MPEP 2141.01)**

The teaching of Scholz et al. has been set forth above.

Ascertainment of the difference between the prior art and the claims**(MPEP 2141.02)**

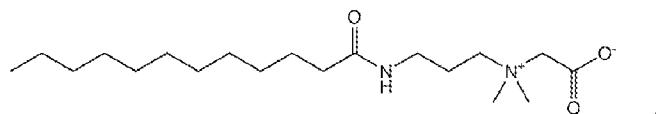
Scholz et al. do not teach the use of pH adjuster in the composition. However, this deficiency is cured by Hoang et al.

Hoang et al. teach a skin disinfecting formulation that provides antimicrobial effectiveness and is mild and gentle to human skin, wherein the formulation comprises an alcohol, a block copolymer, a foaming surfactant, an emulsifier, a polyalkylene glycol, a moisturizer and/or emollient, water which is balanced to 100 % by weight of the formulation, and further with a thickening agent (column 1, lines 45-53; column 2, line 1; column 8, Table 1). Hoang et al. teach that the skin disinfecting formulations can provide significant foaming properties, good solubility in water, and is suitable for use in the health care profession (column 2, lines 2-42).

Specifically, Hoang et al. teach that the preferred alcohol for use in the skin disinfecting formulation is isopropyl alcohol and ethanol, or isopropyl alcohol which can be present in an amount from about 50-80 % by weight (column 1, line 57; column 3, lines 1-5). Hoang et al. also teach that the block copolymer is polydimethyl siloxane-polyethylene oxide composed of a siloxane backbone with organic polyalkylene oxide pendants, which the silicone block copolymer can

provide desired properties, such as low surface tension, high wetting, good dispersing, emulsifying, lubricity, sheen, gloss enhancing, static suppressing, good thermal stability, compatibility with organic surfactants, and low toxicity profile (column 3, lines 6-27). Hoang et al. also teach that the polydimethyl siloxane-polyethylene oxide is present in an amount from about 0.02 % to about 5 % by weight (column 3, line 66 to column 4, line 2).

Hoang et al. further teach that a foaming surfactant or foaming builder is included in the skin disinfecting formulation because the foaming surfactant enhances the foamability of the formulation, wherein the desirable foaming surfactant can be an amphoteric surfactant, i.e. lauramidopropyl betaine surfactant which is mild to skin irritation, and can be present in an amount about 5 % by weight of the formulation (column 4, lines 3-29). It should be noted that lauramidopropyl betaine is the same compound as cocamidopropyl betaine, which has a chemical structure represented as follows:



In addition, Hoang et al. teach that it is desirable to adjust the pH of the skin disinfecting formulation so that it is compatible with the pH of the skin and to avoid unnecessary irritation to the skin. Hoang et al. teach that small amounts, such as less than 1.0 %, of a non-toxic acids substances may be added to the formulation, wherein the suitable acids include hydrochloric acid, phosphoric acid or citric acid, and the formulation can be adjusted to a pH within the range from about 5 to about 8 (column 6, lines 34-44).

Finding of prima facie obviousness Rational and Motivation
(MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teaching of Scholz with Hoang to arrive at the instant invention.

One of ordinary skilled in the art would have been motivated to include a pH adjuster into the composition because the prior art teaches that it is desirable to adjust the pH of the skin disinfecting formulation so that it is compatible with the pH of the skin and to avoid unnecessary irritation to the skin.

From the teaching of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made.

(4) Claims 1, 17-18, 20, 45, 48, 52, 65, 90, 94-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al. (U. S. Patent No. 5,951,993) in view of Martens et al. (U. S. PG-Pub. No. 2005/0031847) and Muller, R. (U. S. PG-Pub. No. 2004/0167195) combined.

Applicants Claim

Applicants claim a silicone surfactant composition comprising: (a) a silicone-based surfactant (b) a foam stabilizing agent (0.01-10 %); (c) a moisturizer or emollient or a combination thereof (0.05-5 %) and (d) water; wherein the composition further comprises the moisturizer and emollient, i.e.

cocoglucoside, glyceryl oleate, PEG-200 hydrogenated glyceryl palmitate, PEG-7-glyceryl cocoate and dihydroxypropyl PEG-5 linoleammonium chloride; and a C₁-C₄ alcohol, i.e. methanol, ethanol, n-propanol, isopropanol or a combination thereof (from about 60-80 % v/v of the total composition).

Determination of the scope and content of the prior art

(MPEP 2141.01)

The teaching of Scholz et al. has been set forth above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Scholz et al. do not exemplify the particular moisturizer and emollient, i.e. cocoglucoside, glyceryl oleate, PEG-200 hydrogenated glyceryl palmitate, PEG-7-glyceryl cocoate and dihydroxypropyl PEG-5 linoleammonium chloride, as claimed. However, this deficiency is cured by Martens et al. and Muller, R. in combination.

Martens et al. teach a cleansing composition comprising a lipid phase and an aqueous phase, wherein the composition when applies to the skin would provide optimal cleansing performance and superior skincare properties (see: [0001, 0017-0018]). Martens et al. also teach that the lipid phase of the composition can include glyceryl oleate and cocoglucoside as skin conditioners; hydrogenated palm glyceryl as suitable active ingredient (see: [0166, 0237, 0281]

and claim 7); the aqueous phase can include PEG-7 glyceryl cocoate (see: [0390]).

Muller, R. teaches a microbicidal composition comprising an antimicrobial agent, at least one polyol and at least one cationic surfactant, in which the use of polyol and cationic surfactants can help to prevent the proliferation of bacteria and fungi and to minimize the risks of allergies development when treating keratinous materials (Abstract; [0017]; [0001-0006]).

Muller, R. also teaches that the suitable one or more cationic surfactants can be those well known *per se*, i.e. quaternary ammonium salts (e.g. dihydroxypropyl PEG-5 linoleammonium chloride), and the amount of the cationic surfactant can be present from about 0.1-5 % by weight, based on the total weight of the composition ([0074], [0076]).

Finding of *prima facie* obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teaching of Scholz with Martens and Muller to arrive at the instant invention.

One of ordinary skilled in the art would have been motivated to incorporate the additional ingredients, such as the skin conditioners and the cationic surfactant set forth above, because these ingredients can provide advantages to the skin, such as the skin conditioners when applies to the skin can provide optimal cleansing performance and superior skincare properties, and the cationic

surfactants when applied to the skin can help to prevent proliferation of bacteria and fungi and to minimize the risks of allergies development. Therefore, the desirable effects produced from these additional ingredients would have motivated one of ordinary skill in the art to employ them in the composition, if they are desired.

From the teaching of the reference, it would have been obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

(5) Claims 1 and 82-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholz et al. (U. S. Patent No. 5,951,993) in view of Briscoe et al. (U. S. Patent No. 4,440,653).

Applicants' Claim

Applicants claim a foam composition, which the composition comprises:

(a) a C₁-C₄ alcohol; (b) a silicone-based surfactant; and (c) water; wherein the composition further comprises an additional surfactant, i.e. fluoro-surfactant.

Determination of the scope and content of the prior art

(MPEP 2141.01)

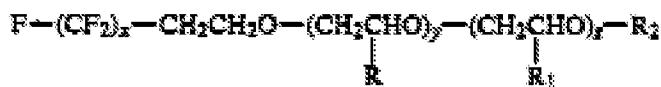
The teaching of Scholz et al. has been set forth above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Scholz et al. do not teach the use of fluorinated-type of surfactant in the composition. However, this deficiency is cured by Briscoe et al.

Briscoe et al. teach a method of forming a highly stable foam containing high contents of lower alcohols, i.e. ethanol, n-propanol or isopropanol, and a foam-forming, stabilizing surfactant, or a mixture of such surfactants (see: column 1, lines 5-10 and line 59 to column 2, line 6); Briscoe et al. teach that the surfactant which provides foam-forming and stabilizing effects can be a non-ionic fluorinated ethoxylated surfactant represented by the structure as follows where R, R₁ and R₂ = H (see: column 2, lines 17-36; column 5-6, claims 1-2).



Briscoe et al. also teach that the fluorinated foam-forming surfactant is combined with the alcohol to form an aqueous alcohol solution, which the surfactant is present in an amount from about 0.1 % to about 2.0 % by weight relative to the aqueous alcohol solution (column 5, claims 3-4).

Finding of prima facie obviousness Rational and Motivation

(MPEP 2142-2143)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Scholz et al. with Briscoe et al. to arrive at the instant invention.

One of ordinary skilled in the art would have been motivated to incorporate additional foam-forming surfactant into the foamable alcohol composition because the prior art Briscoe teaches that these type of fluorinated surfactants can provide foam-forming and stabilizing effects, and they are useful and suitable for foam formulations which contain high alcohol contents. Therefore, their desirable foam-enhancing and foam-stabilizing effects would have motivated one of ordinary skill in the art to employ it into a foamable alcohol composition to improve the foaming effect of the composition.

From the teaching of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

No claims are allowed.

Contact Information

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone

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number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C./

Examiner, Art Unit 1616

*/Mina Haghigian/
Primary Examiner, Art Unit 1616*